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COMMUNICATIONS.

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

By A HOSPITAL SURGEON OF PHILADELPHIA.

(Continued from page 332.)

Surgical Diseases and Accidents—Syphilis; or the Venereal Disease.—This disease, it is stated, was brought by the returning soldiers from the siege of Naples. In our condensed and general view of this subject, it obviously resolves itself into two great divisions: Local and Constitutional.

When local, it consists of four varieties of sores or chancre.—1st, Follicula; 2d, Phagedenic; 3d, Indurated; 4th, Simple Abscess or Furunculus.

Follicular, on the first day, appears as a small pimple; on the second or third day, becomes open pureform. It is inflamed red as scarlet. Do not use nitrate of silver in this state, as it will produce phagadæna. The proper treatment is to bleed, purge, low diet, applying cold locally unless it should produce chills, then use warm fomentations. When the inflammation has been reduced, destroy by local caustics; the best of these is argentic nitratum, and dress with lint dipped in water, with aromatic wine.

If it refuse to heal, edges open and everted, there is a want of healthy plasma; use half a grain hydrargyri protiodiedi night and morning; black wash, and pure port or aromatic wine as local stimulants.

Stop the mercurial when the gums are sore; if it purge or gripe, combine opium or lactu-

canim with it. If the patient is feeble, use ferri tart. gr. vi., twice or three times a day; take care that the mercurial is not employed to excess, from ʒss. to ʒj. is usually sufficient. If it produces fatigue, large red blotches on the skin, pains in the bones, stop its use.

2d.—Phagedenic is of two kinds, white and black sloughs; dependent always upon some constitutional vice, as scrofula, intemperance, syphilis, etc.

Do not purge, starve, bleed, or use mercury, unless combined with tonics and stimulants, as Peruvian bark and its salts, iodid of iron, potassium, oil jacoris, etc. Locally, rest position, yeast poultice, equal parts, tinct. iodine and alcohol, sulphate of copper, or, when it is melting away, apply collodion to exclude air, but no warm or greasy applications.

To remove smell and restore tone, apply a wash of liquor soda ch. or solution of chloride of lime.

Constitutional.—3d. Indurated lump under the skin, or ulcer with hard base. Rely on constitutional treatment. Locally apply dry powder, as calomel, with opium or morphia; no greasy application. Require two to six weeks treatment, use mercury; the bi chloride of mercury is one of the best preparations to employ some time; use it until the hardness is gone, and for two weeks after.

4th.—Furunculus, boil, or abscess. In its first stage, treat it in same manner as an ulcer; but you will find it not so easy to cure. Always attend to the condition of the constitution. Employ mercury until the ulcer, if open, is disposed to heal. After it has healed, use the mercurial as long as it took to heal it, to prevent secondary symptoms. If unable to salivate with the bi chloride or the iodid, employ the cinnabar by fumigations, by placing it on a heated iron weight or piece of iron, and placing a funnel over it, and inhaling it with the vapor of water.

Secondary symptoms of Hunter; Tertiary of Ricord, first bubo or purplish tumor in groin, one or both, even without sore on penis; but we are more certain of its nature when there is an ulcer on the penis, and can trace its history from impure connection.

Treatment:—Keep the patient in bed, leech, purge, low diet; employ the mercurial for two or three weeks, apply ung. hydr. to the swelling. If this fail, and suppuration is likely to ensue, apply blister, mercurial plaster, tinct. iodine and alcohol, equal parts. If suppuration is still likely, open it. Puncture it with a lancet, and give the mercurial in tincture of bark. After puncture, use dry and aromatic wine, with poultice of flaxseed meal. Open all sinuses, apply sulphate of copper, and pare off the edges of the wound, and again apply lint, with aromatic wine.

Neglected or improperly treated bubo is followed by other secondary diseases, as ulcerated sore throat or tonsils, skin diseases, syphilitic eruptions. 1st, Roseola syphilitica; 2d, Vesicular do.; 3d, Rupia do.; 4, Leichen do.; 5th, Tubercula do.; caries of the bones of the nose, head, and jaw.

In the treatment of almost all skin diseases, is by changing the condition of the blood, by sulphur, vapor, and warm baths three times per week.

R Potassii iodii gr. v., in a large tumbler of water or hop tea, three times a day; or the hydr. bi chloridii, given in officinal solution, with decoction of guaiacum; or, best of all for skin affections, is the decoction of Zillman.

Its mode of preparation is as follows:

Decoctum fortior.

R.—Sarsaparillæ radice concisæ, $\frac{3}{4}$ iv.
 Aquæ fontanæ, - - - Oxxiv.
 Coque per quartam horæ partem,
 Aluminis et adde.
 Sacchari albi, aa - $\frac{3}{4}$ vj.
 Hydrargyri chloridi mitis, $\frac{3}{4}$ iv.
 Antimonii oxysulphureti, $\frac{3}{4}$ j.
 In nodulo ligato, sub fine coctionis admisce.
 Sennæ foliorum, - - - $\frac{3}{4}$ iij.
 Glycyrrhizæ radice, - - - $\frac{3}{4}$ iss.
 Anisi seminim.
 Fœniculi seminim, aa - $\frac{3}{4}$ ss.
 Decoque ad octaria, - - - xvi, et cola.

Decoctum tenue.

R.—Decocti fortioris residui.
 Sarsaparillæ radice, $\frac{3}{4}$ vj.
 Aquæ fontanæ, - - - Oxxiv.
 Coque, et sub fine coctionis, adde
 Pulveris corticis citræ.
 Pulveris cinnamomi.

Pulveris cardamomum, aa $\frac{3}{4}$ iij.

Glycyrrhizæ radice, - $\frac{3}{4}$ vi.

Decoque ad octaria, - - xvj, et cola.

After a dose of calomel and jalap pills, drink from a pint to two quarts a day, in the morning taken warm and in the evening cold. In ulcerations of the throat, use the same treatment, applying solutio argenti nitratis $\frac{3}{4}$ j. to f $\frac{3}{4}$ j. water. In the case of condylomatous tumors around the anus, cut off and apply calomel and powdered gum Arabic or chloride of zinc in solution. Venereal warts on penis, which look like raspberries, cut them off, or apply nitric acid with a piece of wood, or nitrate of mercury or silver with dry lint. Larvated or masked cancers or ulcers in the urethra, if not cured by injections, use Lallemand's port caustic.

In syphilitic caries, use constitutional treatment, and treat locally in the same manner as when arising from other causes.

General Nature and Treatment of Wounds.—In our observations on the preparatory steps previous to and during an engagement, we dwelt upon the great importance of the tourniquet and its proper construction. The following observation of the great military surgeon, Hennen, should be carefully looked to by the field-surgeon:—"The straps of the screw-tourniquet, usually put in instrument-cases, are often defective, and their buckles unsafe; they should be carefully proven before using, lest they should give way at a critical period of an operation. The clumsy pieces of leather, added to some, are entirely useless; but a small, neat pad, secured with a bit of tape, may be retained." He also recommends the tenaculum of Assalini and the artery-forceps, with a slide.

The wounded, after a general engagement, may be calculated at the rate of two per cent.; see, therefore, that no wounded man bleeds to death for want of a tourniquet. In a large body of troops, wounds of all kinds occur, being received both in and out of camp; we shall, therefore, enter upon, first, the

General Consideration of Wounds; but especially those received on the battle-field; and we sincerely trust that the humane surgeon will never hesitate to carry the comforts of this noble art into the very midst of the combatants, and that our government will reward such acts of bravery. Let no one enter the service because it is free from danger; for, if the surgeon will do his duty, he must accompany his regiment until the action commences, and then

only retire to some comparative place of safety.

Several instances are on record in which the medical officer has been killed in discharge of his duty upon the battle-field; and others in which, on the death of the proper officer, the medical man has not hesitated to take command, and faced the batteries of the enemy.

Cooper defines a wound to be a recent solution of continuity in soft parts, arising from an external cause, and generally disposed to bleed. There are exceptions to this definition, as, for instance, muscles are lacerated by their own contraction, and the integuments are pierced by the projection of fractured bones through them. Wounds are devisable into various classes—first, according to the agent producing them; second, the character of the wound; third, the location in which it occurs. They are also divided into the simple and complicated. The simple meaning merely division of integuments; the complicated are accompanied with injuries to blood-vessels, nerves, luxations, and fractures.

The danger of wounds depends, first, on their size—the larger the more danger. If a wound, for instance, is six or eight inches long, it is always dangerous to life, as erysipelatous inflammation is liable to set in. Second, upon the weakness or strength of the organization of the parts involved. In bone, cartilages, and tissues of low organization, they are ten times more severe than when occurring in skin, muscle, etc. Third, upon the importance of the organs involved. Those of the vital organs are apt to be followed by death. If it be in the head, and confined to the cerebrum, patients often recover; but, if the base of the brain or cerebellum, the patient is almost sure to die. A shot in the stomach is ten times more dangerous than in the intestines. Fourth, upon the kind of blood-vessel wounded; if an artery, there is danger of immediate death from hemorrhage, unless the vessel is ligated, or can be impressed; still the danger is greater, in prospect, from a lacerated vein, as phlebitis or metastatic abscess may ensue. Fifth, on the diathesis of the patient, always ascertain, if possible, whether the wounds of your patient bleed profusely or suppurate much, instead of healing kindly. Some patients are very prone to inflammatory action. Sixth, upon the age; youth is more favorable for operations; after fifty, there is greater danger of non-union in extensive wounds.

The causes of death in wounds are hemorrhage, tetanus, traumatic or symptomatic fever, erysipelatous inflammation, hectic fever, gangrene, and metastatic abscess. This latter occurs, after amputation on the head, chest, or abdominal viscera. If there be pain, loss of respiratory murmur, and dullness on percussion in the chest, you are apt to have a local abscess forming. No matter how extensive or trivial a wound may be, treat it carefully as soon as called to it; obey the injunction of Aesulini, and "neglect no wound." Dress wounds lightly; use but little grease, or bundle it up in charpie; apply dry or wet lint in cold water; if that is disagreeable, use the water tepid or warm. If you are called, and you find the wound filled with salves, etc., wash all off clean; let the wound lie open until it shines like varnish, from the exudation of true plasma; then apply the water-dressing.

When there are no foreign bodies present, you should always endeavor to unite wounds by immediate or mediate union; by so doing, you save your patient time, pain, and deformity. If the wound contains a foreign body, wash out the wound clean, and rather induce suppuration, that the pus may wash it out, for, if you close it too soon, the dirt, glass, wood, shell, or cloth, will cause the cicatrix to remain tender, and suppuration comes, long after, to discharge the foreign body; wounds are divided into different classes, and first of these are—

Incised Wounds.—They are solutions of continuity made by sharp-cutting instruments, which make a smooth cut, and hemorrhage is the great danger to be guarded against. The direction of the cutting-instrument is important. In large wounds of the thigh, if the cut be across the limb, the wound will gap. This gaping of wounds depends upon a variety of causes; in this instance it depends upon muscular contraction, hence, in your treatment, pay attention to position. In the case of superficial wounds of the skin, it is the organic contractility of the part which makes it gap.

There is apt to be a great amount of blood escaping from a fresh incised wound, which depends upon the kind and size of the vessel involved; if it is arterial, it escapes in jets, which you can count. There is no steady stream, and the blood is of a bright red hue. If it is of a mixed character, arterial and venous, the jets have a purplish hue.

If there is a profuse bleeding from a great number of small vessels, and you cannot dis-

tinguish the kind, from which it escapes, ligate the limb between the wound and heart with the tourniquet or handkerchief, and twisted stick. If it be arterial, it will cease; if it be venous, oozing will still continue. Apply ligature to arteries, and employ compression with styptics to veins.

Treatment of incised wounds in the skin apply adhesive strips, supported by compress and bandage.

The amount of blood lost will depend upon the character of the wound in the artery. A transverse cut of an artery bleeds but little; a round one, made by a puncturing instrument or an oblique or longitudinal one, will bleed much more freely. In the first, contraction and retraction prevents the bleeding, hence, inquire into the history of the case, and know the instrument with which the wound was inflicted, this will give you the key for your action. If it is a stab, there is no time to be lost. Incised wounds are accompanied with great pain, and pain produces restlessness, which induces nervous irritation and fever, and fever causes supuration, hence allay this by narcotics.

Hemorrhage from Wounds.—Arrest the bleeding; that done, and you have time to reflect. What is next to be done? Nature does it in some cases; if she does not, the surgeon must do it for her. In extensive wounds the patient often bleeds until fainting upon the battle field, and this is the basis of our treatment in internal hemorrhage, arising from wounds of the stomach, lungs, or intestines; prevent reaction from taking place too soon by keeping the patient in an upright position, so as to aid nature: When an artery is cut across it contracts, and thus diminishes its calibre, then it retracts or shortens itself, and becomes lost in its sheath, the syncope makes the circulation slower, and a clot forms at the divided end, and blocks up the artery. There is an external clot which forms between the artery and its sheath, and an internal clot forms in the calibre of the vessel. These clots become organized in time, and become absorbed, if a small vessel. If it is a large one, it remains for life a fibrous cord. The small vessel is absorbed to the first anastomosing branch, as the current of blood washes it off above. This is important to know, as you should never ligate near an anastomosing branch, for when the ligature comes away, the blood from behind will wash out the clot, and secondary hemorrhage comes on, because

the clot was feeble, being so near a branching artery.

To stop bleeding from a wounded, temporal artery, cut it across that it may contract. In nine out of ten cases no clot will form unless you do so. In round or oblique, or longitudinal incisions, the patient dies from false aneurism or false exhausting hemorrhage.

If a soldier be shot and the ball has passed through the lungs, he falls, becomes almost pulseless, and no blood escapes from the external wound. Look carefully to him, as he is bleeding internally. Lift him up that he may faint; the circulation ceases a moment or so. Nature takes advantage of this cessation, and a clot forms and blocks up the vessels, which also contracts. If, however, he is a vigorous, powerful man, and lifting him in the upright posture fail to make him faint, bleed him from both arms until he does.

Afterwards be in no hurry to induce reaction. It will do him no harm to let him remain four or five minutes; if, however, he does not resuscitate, then dash cold water in his face, employ dry friction to the skin or mustard cataplasm, and give him fresh air. After treatment, place him in a cool, dark room, so that the secretions will readily pass out of the wound, which dress lightly; keep him very still. Give him but little fluid, employ tincture veratrum viride or digitalis, with opiates, to keep down the force of the circulation. If high fever come on, bleed him, and give him arterial sedatives, with small doses of calomel, and tartar emetic.

When all these means fail, in hospitals and armies they have an instrument to produce hemorrhage, in the French army. It has been found useful in internal hemorrhage and apoplexy of the lungs or heart. It is a copper air-pump with an India rubber receiver. The receiver is bound on the leg and a vacuum rushes by means of the piston is formed. The blood rushes into the limb, and it swells in two or three minutes to fill the vacuum. Thus a powerful revulsion is produced from the bleeding part. It was invented by a Frenchman, and is employed in the French hospitals.

When the vessel is accessible, in wounds of cavities or extremities, we have certain mechanical means to arrest the hemorrhage.

To be Continued.

Pathology of Pulmonary Tuberculosis.

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PART FIRST.

Pulmonary Tuberculosis, Phthisis, and Consumption, are terms by which is implied the wasting of the body from the effects of a disorganizing process going on in the lungs. This disorganization owes its origin, not to any inherent disease of the lungs themselves, but to the deposition of tubercular matter, and the changes which that matter undergoes, and the effects that it produces upon the surrounding tissues. In a word, it is a great constitutional malady, which plays its most prominent part in the lungs. In order, therefore, to understand the changes that occur during the progress of this disease, it will be necessary to describe the nature of tubercular disease in general.

Tubercular formations occur at all periods of life, from the most tender infancy to the most decrepit old age, and cause about one-third of the mortality of the human race. There is scarcely an organ in which tubercular matter may not be deposited. It is, however, most commonly found in the lungs, bronchial ganglion, mesenteric ganglion, small intestines, and pleura, and is usually deposited in two forms—the *gray* and the *yellow*.

The *gray* variety is, by far, the most common of all tubercular deposits. It is usually of a round shape, but may be more or less flattened, according to the degree of compression exerted upon it by the parts in which it is situated. In volume it varies, from a pin-head to that of a pea. In number, they may vary from one to many thousand. In their early state, they are perfectly isolated; but, as they augment in number, they gradually approach each other and ultimately coalesce. In this manner, large masses are frequently formed, varying in density from the consistence of recent lymph to that of fibro-cartilage. Tumors of this description seldom exceed the dimensions of a walnut; but they may attain the bulk of an orange, or even the head of an infant. This form of tubercular deposit is most commonly found in the lungs.

Yellow tubercles have the same general forms and relations as the *gray*, but are commonly larger and less firm, and are more often grouped so closely, by fusion, that they make up nearly

uniform tubercular masses, half an inch or more in diameter; at least, they assume this form in the lungs. They are usually pale yellow or yellowish white, opaque, friable, dry, and cheesy. It has been generally considered that this form of tubercular matter and the *gray*, merely represent two stages of the disease. This opinion, in the majority of cases, is undoubtedly well founded; thus, *gray tubercle*, in the process of its development, as it approaches to softening, usually assumes a granular appearance, and may be converted into the *yellow* variety. But, on the other hand, we also meet with tubercles of the *yellow* variety in, apparently, the very earliest stage of development; hence there can be no doubt that this variety can exist primarily, since, from the very commencement, granules are separated from the tubercular mass, as from *gray tubercles*.

Minute Structure of Tubercles.—The minute structure of both forms of tubercular matter are the same. When examined by the microscope, they are found to be composed of—

1. A transparent, amorphous, vitreous stroma occurring in large masses, which perfectly resemble coagulate fibrin.
2. Minute granules, varying from the 800th of a line in diameter to imperceptible minuteness, chiefly of a roundish form, and occurring in large masses of a brownish color.
3. Imperfectly-developed cells and cytoblasts, with or without nucleoli. These cells are generally very imperfectly developed, and a distinct nucleus can seldom be recognized. Their size usually varies between the 400th and 300th of a line, their diameter rarely attaining to the 200th of a line. They are very accurately delineated in the following figures:



Fig. 1.—A, tubercular cells magnified 400 diameters. B, the same cells magnified 600 diameters. The cells are designated by a, and the granules by b.

Fig. 2.—Tubercular cells rendered transparent by acetic acid.

Mingled with these, and varying according to the situation and circumstances of the tubercles,

various other, but accidental substances are often found, such as elastic fibres, degenerated epithelial cells, various degenerated products of inflammation from the adjacent parts, granule-cells and pus-cells, molecules of calcarious matter, or of pigment and crystals, especially of cholestearine. These different elements occur in individual cases in very different proportions. Sometimes the epithelial cells predominate; sometimes the common pus-cells; then, again, we will find almost the entire mass composed of tubercular cells and granules. Sometimes the calcarious granules will be in excess, with other degenerated products.

Fig. 3.



Fig. 4.

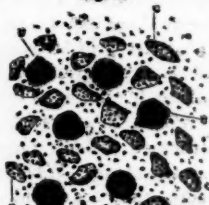


Fig. 3.—Cretaceous Tubercles; *a a*, tubercular cells; *b b*, crystals of cholestearine; *c c*, granules of tubercles.

Fig. 4.—Tubercular matter mixed with melanosis; *a a*, melanotic globules; *b b*, melanotic granules; *c c*, tubercular cells.

Chemical Composition of Tubercle.—The chemical composition of tubercular matter has been studied with no very satisfactory results. The greatest diversity of opinion prevails on the subject. Dr. Hatch found, on analysis of one hundred grains of dense tubercular matter, the following proportions:

Albumen,	-	-	-	26
Gelatine,	-	-	-	22
Fibrine,	-	-	-	34
Water,	-	-	-	30—100

Simon found one hundred parts to contain:

Water,	-	-	-	84.27
Fat containing cholestearine,	-	-	-	1.40
Spirit extract of salts,	-	-	-	1.52
Caseous matter with water ext.,	-	-	-	1.14
Water extracts and salts,	-	-	-	3.80
Insoluble constituents,	-	-	-	4.44

100.

Legendre found in one hundred parts:

Water,	-	-	-	66.67
Albumen soluble in water,	-	-	-	5.08
Cholestearine,	-	-	-	14.38
Gelatine,	-	-	-	.25
Sulphate of Lime,	-	-	-	.75
Fatty matter,	-	-	-	1.70
Membrane on coagulated albumen,	-	-	-	11.07
Loss,	-	-	-	1

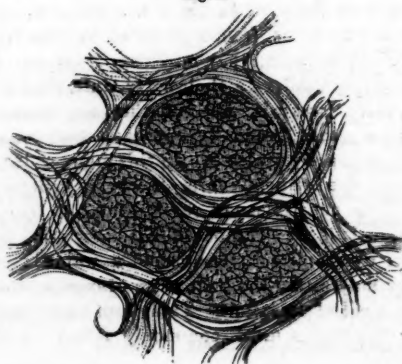
100.

By comparing these tables, the reader will see quite a different result in the three analyses, and this may be accounted for on the supposition that the chemical constituents of tubercular matter varies, as it no doubt does, not only in the different stage of its existence, but also in different individuals, in different situations, and in different parts of the same organ. It may also be inferred, that it is modified, more or less, by the state of the solids and fluids, or by the constitutional peculiarities leading to its formation.

But so far as chemical analysis can be relied upon, we may infer that there are not less than seven constituents entering into the composition of tubercular matter previous to the stage of softening, namely, albumen, casein, fibrin, pyin, fatty matter, salts of soda, lime, and a peculiar substance called tuberculin.

Its Place of Deposit.—Tubercular matter is most commonly deposited in the cellular tissue of the lungs. It may also be seated on the free surface of the mucous membranes of the bronchia and other tissues of the body. In whatever organ of the body it is met with, if mucous tissue enter its composition, that tissue is either exclusively affected, or more extensively than any of the other component tissues. In the lungs it manifests a decided predilection for the mucous texture of the air cells. At first it is deposited in small portions, which become nuclei for the concretion of more; a new habit or mode of nourishment is established at the spot, and the result is, that the tubercle increases in size until it becomes ripe.

Fig. 5.



When they become fully developed, they rarely exist long in any part of the body without exhibiting some change in their appearance. They soon lose their semi-transparent appear-

ance, and become of an opaque or dead color. This change usually begins in the centre of the mass, apparently because, being void of blood-vessels, the centre is further removed from the vivifying influence of the blood. But it should be remembered that tubercles are frequently deposited, at the very first, in the yellow opaque state—this condition being the mark of a very low degree of action in the nutritive functions; and the very worst form of tuberculous diseases are commonly the result of this state of the system. When the gray tubercle turns to the yellow, it becomes quite soft. This is the commencement of a change to which all tubercular matter tends, namely—

Maturation and Softening.—This generally occurs in the following manner: The central part first becomes soft, so that, when cut across, it looks cracked and crumbling, and may be pressed away from the surrounding firm part, leaving a little central cavity. In the second place, it becomes liquid, like thin pus, with flakes or gumous particles in a pale yellowish, turbid fluid, and as the change makes progress, the whole tuberculous mass may be reduced to the same liquid state. The usual sequence of the liquification of tubercle, is its discharge from the tissues enclosing it. This is accomplished by ulceration—a consequence of inflammation in the tissues over the tuberculous matter—and resembles that for the discharge of common pus.

When the liquified matter is discharged through the integuments, it leaves a cavity or vomica. When a cavity of this description is formed, it will either be enlarged by the formation and discharge of fresh tuberculous deposits adjacent to it, or it may be healed, by its boundaries being infiltrated by the products of organizable inflammation. But alas for mankind! the latter result does not often occur. At the borders and base of the cavity, we most commonly find secondary tubercles which follow the same course of the primary, liquify, and are discharged into the cavity, which they thus increase by adding their cavities to it. When these cavities are very numerous, and situated in vital organs, they produce wasting of the body, with hectic fever, night-sweats, and diarrhoea, which terminate in death.



The Twenty-Eighth Session of the Scientific Congress of France is to be held at Bordeaux on the 16th September proximo.

On Coca Leaves.

By J. F. MAISCH.

The object of this paper is to call attention to the peculiar properties of the leaves of *Erythroxylon Coca*, Lamack, a South American shrub, which is largely cultivated there, the leaves having gained an importance in several states of South America, which, I think, ought to induce physicians and, at the present time, surgeons of the army and navy to test, under their own careful supervision, the well-authenticated power of preserving human life and strength without any other food. It has been ascertained, and is proved by the testimony of many travellers and physicians, residing in the above-named countries, that the Indians and the workingmen, who are subject to great hardships, chew the leaves habitually, in connection with the alkaline ashes of some plants, or with a little lime, and are thereby enabled to endure fatigues without food or sleep which would seem impossible, if the facts were not substantiated by so many learned men. The following contains some of these facts, as related by Tschudi, Poeppy, Weddell, Scherzer, Valdez, and Montegazza.

Tschudi employed an Indian for excavations for five days and five nights in succession, who, during this entire time, eat no food and did not sleep but two hours at night; immediately afterwards, he accompanied his employer, who was on horseback, and travelled on foot, in two days, a distance of sixty-nine English miles. During all this time he merely chewed coca, and then expressed his willingness to endure the same hardships again, provided he was supplied with these leaves.

An Indian, in the employ of Scherzer, travelled the distance from La Paz to Taena, 250 English miles, in four days, then, after resting one day, returned in five days, over a mountain 13,000 feet in height; he partook of no food except coca and some roasted maize.

During the wars in 1817, when the Spaniards were cut off from all supplies, and had to be constantly prepared for fight, they subsisted almost entirely on coca, thereby retaining their vigor, and preserving themselves from starvation and annihilation by a vigorous foe. The horses of travellers, who are accompanied through the deserts by Indian guides on foot, who chew their coca, frequently break down on hot days from exhaustion, when their guides are still able to travel many miles. The

miners, amid deadly metallic exhalations, and in an unfavorable climate, preserve, by coca, not only their strength, but also their health; and the bearers of burden travel through marshes and over steep rocks, where horses and mules cannot go.

The Austrian frigate *Novara*, brought, some years ago, from her scientific expedition, a considerable quantity of coca leaves, with which it was intended to experiment in the army and navy. Nothing has been made public of the results of these experiments, but it is possible that, in another European war, these leaves may exercise a decided influence on the results of battles.

Propositions have been repeatedly made, in Europe, to introduce them in the navy, and cause emigrant and other ships to supply themselves with coca, so that the crew and passengers, in cases of accident or disaster, may, by keeping up their strength, have increased chances of being ultimately saved.

The dose of coca leaves is about one drachm, which is increased in the most fatiguing hardships to not over half an ounce, and is renewed after two or three hours. Persons unaccustomed to it require less. Dr. Montegazza chewed, in one day, two ounces and a quarter of coca, and, after sleeping three hours, required no food for forty consecutive hours, without experiencing any loss of vigor; he found them act alike in Italy, as he had observed in Bolivia.

In the latter country, an infusion of coca is employed by the inhabitants in indigestion, colics, flatulency, hysteria, and various other diseases. This infusion has not the property of supplying the place of proper nourishment, but it is not improbable that it may be imparted to it by the addition of an alkali.

From all reports by reliable learned men, it seems evident that coca may become a valuable medicine, and that it deserves, at least, a trial in an army of several hundred thousand men, who are exposed to all the hardships incidental to war, in a warm climate, to which they are not in the least accustomed. It must be mentioned that coca has no injurious influence on the health and life, as the Indians of Peru frequently live to the age of 130 years; but an excessive indulgence, like all excesses, undermines the bodily strength, and hastens the individual to an untimely grave.

Bibra estimates the yield of coca leaves at thirty millions of pounds annually, and the consumers at ten millions.

Medical Societies.

PHYSIOLOGICAL AND THERAPEUTICAL PROPERTIES OF THE VERAT. VIRIDE.

Read before the Dubuque Medical Society at its semi-annual meeting in July, 1861, and published by request of same.

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I propose this evening to briefly call the attention of the Society to some of the physiological and therapeutical properties of the *verat. viride*.

This article of the *materia medica* is comparatively new to most of the profession in our country, while our brethren in England and upon the continent, have been, until recently, quite ignorant of its valuable properties.

Thirty or more years ago, Prof. Tully, of New Haven, was in the habit of recommending its use; and in 1835, Dr. Osgood, of Providence, whose attention was called to this drug by Prof. T., published the results of his investigations in the "*American Journal of Medical Sciences*;" yet the profession neglected it until after the publication of Dr. Norwood's papers, about the year 1850, and even then it was several years later before it came into extensive use.

So tardily were its merits recognized, that Prof. Dunglison in the last issue (1856) of his "*New Remedies*" failed to record it; and we may, perhaps, be safe in assuming that the *veratrum viride* has attracted general attention only during the last five or six years.

This article, known by the common names of *Indian poke*, *poke-root*, *swamp*, or *American hellebore*, belongs to the natural order *melanthaceae* or *colchicum* tribe. It has been thought by some, especially European physicians, to be identical with the *veratrum album* of the Alps and Pyrenees, and, on account of the violent and uncertain action of the latter they have looked upon the American hellebore with disfavor. Although the physiological action of these two species is in some respects similar, yet it is in the main, quite as different as that of *veratrum album* and *colchicum autumnale*. So far as I am aware, no other active principle than the alkaloid *veratria* has been found in the American hellebore, the same which exists in the European variety. The effects of *colchicum* were long supposed to be due to *veratria* until the peculiar principles, *colchicia*, was detected, and in like manner it is not improbable that further analysis may discover in the *veratrum viride* some new agent.

The American hellebore is primarily a cardiac and nervous sedative, and secondarily, diaphoretic, diuretic, alterative, expectorant, emetic, hypnotic, and rarely cathartic. The

first appreciable effect of a dose of the medicine in health is a reduction of the frequency of the pulse and respiration, accompanied by a feeling of languor and indisposition to exertion, with a desire to sigh. If carried farther, the pulse and respiration are still more reduced, nausea and vomiting supervene, with profuse diaphoresis, increased urinary secretion, and a feeling of utter prostration referred to the præcordia. In disease, its influence as a nervous sedative is more apparent in allaying nervous irritability, while it displays its alterative effects in improving the secretions, rendering the mouth moist, and increasing eliminative action.

The prostration, which is rarely considerable until vomiting supervenes, rapidly disappears if the medicine is discontinued, or administered at sufficiently long intervals, and in such doses as to allow the circulation to be revived. It is well known that the emesis is readily controlled by chloroform internally, opium and stimulation. As the debilitating effects of the drug are thus readily controlled, it has become a subject for inquiry whether it may not in a majority of instances be substituted for the older and more permanent depressants. Certain is it that those best acquainted with its therapeutical effects are most lavish of their encomiums, and employ it in a wide range of disease. Unquestionably accelerated circulation plays an important part in the causation and perpetuation of disease. Wherever sthenic inflammatory action exists, it is doubtless a necessary concomitant, if not a *sine qua non* of such action. The possession then of an agent as manageable and potent for its arrest as are the breaks upon a railway train for their specific purpose, would be an acquisition not easily estimated. My experience with the American hellebore satisfies me that we have in this drug an agent, which enables the physician to maintain for an indefinite time, complete control of the nervous and circulatory systems, and furnishes an important desideratum long felt in *materia medica*.

The diseases in which it has been more generally prescribed are pneumonia, pleurisy, acute bronchitis, peritonitis, puerperal fever, puerperal convulsions, acute rheumatism, neuralgia, and scarlatina. Its therapeutical properties justify the belief that it might be advantageously used in all inflammatory affections of the brain and its membranes, in certain forms of hysteria, irritative fevers, delirium tremens, and it has been suggested in hydrophobia.

Its employment in another class of diseases has been questioned. Veratrum has been condemned in some of our eastern hospitals in asthenic cases attended with much prostration, for instance typhoid fever, on the ground that "we have already a weak, feeble pulse, and the veratrum would only make it weaker." Now, any observer who has carefully noted the action of the hellebore has discovered that the

pulse as it was reduced in frequency became fuller and stronger, while the fact that it causes nervous sedation should not be lost sight of. It should also be borne in mind, that the views of modern investigators in reference to the agency of the nervous system in pathology and therapeutics, essentially modify the treatment of disease. It is a fact well known to all pathologists, that similar phenomena often attend totally opposite conditions of the brain, for which no satisfactory explanation has been given. Prof. Wood suggests an analogy in the phenomena of electricity. Positive and negative electricity both produce attraction and repulsion, the spark, shock, and chemical decomposition.

There are functional derangement, watchfulness, etc., attendant upon super-excitation of the brain, while the debility and depression of the nervous system which explode into delirium tremens are followed by kindred phenomena. But in either case the continuation of the disturbance enhances the primary affection, and by so much removes the system from convalescence.

Take now typhoid fever. True there is a rapid feeble pulse, but the very excitation and irritation which grow out of the cerebro-spinal debility and increased vascular action perpetuate the disturbance, augment this very debility, and wear out the system by excessive friction. In this condition of things, as Dr. Woodward justly and concisely remarks in an able paper to the "Philadelphia Medical and Surgical Reporter for Nov. 3, 1860," "the secretions are locked up; the brain is oppressed; the heart and lungs are laboring to free themselves from the tension to which they were subjected. Now, here is a condition in which remedies cannot act; but if we can subdue this nervous exaltation, the system becomes relaxed, the secretions are restored, the circulation and respiration become slower, fuller and stronger, the lungs oxygenate the blood more completely, and nutrition and depuration, which had before been impossible, allowed to go on." I have seen typhoid cases where the morbid action had continued for weeks with the pulse from 110 to 130, speedily convalesced on reducing the cardiac pulsations by veratrum to 70 or 80 per minute. It is not to be denied that the medicine may be carried sufficiently far to occasion a dangerous and even fatal depression, but it is generally inconsiderable until the circulation is brought below the normal standard, and emesis promptly furnishes intelligence of its approach.

It is due, however, to candor to state that some eminent authorities have quite condemned the use of veratrum. Dr. Charles A. Lee, in an article upon veratrum, recently published in the *Journal of Materia Medica*, asserts that "the same objections will apply to it as have been brought against aconite, namely, the difficulty of regulating its effects, and its dangerously-de-

pressing influence even in small doses. From what we have seen and know of its use," he continues, "we have little doubt that it has caused more deaths in one year than chloroform has since its discovery; and the cause of death has been scarcely less apparent;" which, of course, means the afore-mentioned dangerously-depressing influence of the drug. This is news, indeed, to us Western practitioners, and the conviction forces itself upon us, that Dr. L. has been experimenting with a novel kind of veratrum, which has not yet found its way to prairie-land. We and our medical friends have extensively prescribed it for a number of years to patients, from infants of a few weeks to old age, and thus far we have never seen an instance nor met with a reported case where veratrum viride proved fatal. The nearest approach to one, is a case communicated to the *REPORTER* for June 9, 1860, by Dr. Foreman, of Hoboken, N. J. His patient was taken in labor of fourteen hours duration on the morning of the 19th of May. During the night of the 21st puerperal fever, then epidemic, set in, which Dr. Lee, by the way, calls a "pyogenic affection," where he would be quite unwilling to exchange opium for veratrum. She was treated liberally with opiates till the evening of the 23d, with a rapid increase of the gravity of the symptoms, the pulse reaching 160. At 9 P. M., 5 drops of the tincture verat. virid., half the strength of Norwood's tincture, were given; at 11, 10 drops; at 1, 4 drops; at 3, by mistake, 25 drops, and at 5, 25 drops, making 70 drops in eight hours, fifty of which were administered in about two hours, fully four times as much as would be regarded heavy dosing in her case. Four hours after the last dose of this medicine, which is as "dangerously-depressing even in small doses," when the mistake was discovered, the condition of the patient was alarming, with incessant vomiting, and a respiration of only twelve in two minutes, although the pulse was sixty-six. Ten minims of chloroform by mouth, instantly controlled the vomiting, and under stimulation all unfavorable symptoms, induced by the medicine, disappeared in four hours. The patient had a return of some febrile action, which was controlled by veratrum and morphia, and she made a good recovery.

Dr. Lee regards venesection and antimony safer, more manageable, and more reliable modes of treatment, when anti-phlogistics are demanded. If now, by mistake, he should administer four times the usual dose of antimony, or take two quarts instead of a pint of blood, especially in a "pyogenic affection," would the resulting depression be more readily controlled, or easily recovered from than in the above case, where this "dangerously-depressing agent" was used, which has caused more deaths in one, than chloroform has the world over in fourteen years, and if he should prescribe eight grains of opium instead of two, might he not furnish possibly, even with this

favorite remedy of his, an opportunity to some jury to record a verdict of "Died by the visitation of God?"

In the absence of a better hypothesis we submit the following as the law of its action, by which it may be serviceable in cases of debility, under certain restrictions, and at the same time valuable as an anti-phlogistic. *The administration of verat. viride, carried to a limited extent, allays by its action upon the cerebro-spinal system, nervous and circulatory excitability, and places the system in a favorable condition for recuperation; another degree produces profounder impressions by attacking the sympathetic system, which presides over secretion and nutrition, inducing sedation and constitutional depression, evinced by the rapid waste, emesis, diuresis, and profuse diaphoresis.*

Where there is high febrile action, with a quick, full pulse, it is best to produce a decided impression upon the system, by bringing it as speedily as possible under its influence. It is not well to stop short of free emesis. We have found the interval between the doses laid down by authorities rather long in such cases. The drug will display its effect in an hour to an hour and forty minutes. Last winter my boy, two years of age, while convalescing from scarlatina, overloaded the stomach, and was exposed to a current of air which checked cutaneous secretion. Febrile action set in, with a restless night. On the following day the tongue was covered with a white fur, no appetite, great thirst, hot, dry skin, and by six, P. M., pulse one hundred and fifty, and respiration thirty-six. Three drops of Tilden's fluid extract of veratrum were then given in sugared water. At eight there was less restlessness, and the pulse was somewhat reduced, when three drops more were administered. Ten minutes before nine the pulse rapidly sank to seventy; at nine, it reached sixty, and vomiting commenced briskly. Fifteen minutes past nine, the pulse stood at forty-eight, the lowest point, full and strong; the respiration was twelve, the surface cool, and bathed in perspiration. Vomiting continued for an hour and a quarter, with but little cessation, when the patient fell asleep, and rested finely the entire night. Nothing was given to arrest emesis. There was copious secretion from the kidneys during the night and the following day. The child, though weak, required no further treatment, and speedily recovered.

I have found the hellebore serviceable in bilious remittent. If the febrile action is high, it may be given, in connection with a brisk cathartic, so as to reduce the circulation by the time the latter operates upon the bowels. Anti-periodics may then be administered, with a reasonable prospect of causing the disease to abort.

It has likewise proved highly serviceable in the eclampsia of childhood from teething or intestinal irritation, when the convulsions continue after the bowels have been deterged.

In hysteria* it has appeared beneficial in our hands after all approved modes of treatment had failed, in cases where the proximate cause of the paroxysms had disappeared, and still an hysterical disposition remained.

Veratrum is rendered more active and efficient in various diseases by admixture with other medicines. Thus in acute arthritic complaints, veratrum and colchicum, form a useful combination; veratrum, antimony and ipecac, in the first stages of pectoral disease, and in the latter veratrum, squills and seneka; in cerebral affections hellebore and aconite, and in cardiac hellebore and digitalis.

The usual forms prescribed are Norwood's tincture, and Tilden & Co.'s fluid extract. Dr. Lee informs us that the solid extract has been considerably used by New England physicians in doses of one-fourth to one-half a grain every four hours. Norwood's tincture is made by macerating eight ounces of root in a pint of alcohol, while every fluid ounce of Tilden's represents an ounce of the crude root. We have found a medium dose for an adult male, in an acute case, four to six drops of Tilden, and five to seven of Norwood every two hours. Generally the third dose is required before the system comes well under its influence. If, as will rarely happen, the action of the heart becomes irregular, without much reduction, the medicine should be discontinued and quinine and stimulants administered, or if it purges, demulcents and opium are required. We believe, in conclusion, that few physicians who understand the virtues of veratrum viride are willing to dispense with its use.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

Regular Meeting of June 25, 1861.

Daniel Ayres, M.D., President.

Case of Cardiac Disease; Atheromatous Degeneration of Arteries; Emphysema of Lungs; Fatty Degeneration of Liver and both Kidneys; Large Biliary Calculus, obstructing the neck of the gall-bladder, etc.

From an exhibition of morbid specimens by Dr. Bauer, taken from an elderly lady, lately deceased, the following objects of interest presented themselves:

1. The heart is considerably increased, both in size and weight; the walls of the left ventricle measure nearly an inch in thickness; the papillary muscles are highly developed, and evidently larger; the mitral and aortic valves are thickened and opaque, but still pliable; the ostia are of ordinary size.

2. Fragments of the aorta and smaller arteries exhibit soft, probably fatty atheromatous deposits,

with evident loss of elastic properties of the arterial coats.

3. A fragment of the liver, to which the gall-bladder is attached, shows the marks of advanced fatty degeneration, being almost soft, and of a pale color. The gall-bladder is distended to its utmost capacity, and its contents prevented from escaping by a round biliary calculus, tightly fitting into the neck. Pressure upon the fundus does not effect the discharge of the liquid.

4. Lungs are moderately emphysematous, otherwise healthy, but seem to have been slightly compressed by the heart.

5. The kidneys are in a state of moderate fatty degeneration; their anatomical structure can be still discerned by the naked eye.

In addition, Dr. Bauer had found the liver greatly enlarged, so as almost to reach the spleen. The latter was of ordinary size, its capsule readily peeling off, and its parenchyma rather soft. At no place had he met with an unusual degree of venous hyperæmia; nor were the subcutaneous veins in any way distended. The brain had not been examined.

As the doctor had seen the patient but once, and that in a condition rendering a thorough clinical examination entirely impracticable, he had elicited the following history from her son, who is a very intelligent physician of this city.

The patient was, at her death, fifty-six years of age, of large size, and very corpulent. When nine years old, she was attacked with rheumatism, and for eighteen months kept in bed. Nine years ago she suffered from œdema of the lower extremities, supposed to originate from renal affection, but was entirely relieved in about three months. She had but one child. Menstruation had been regular up to December last. In every other respect the patient seemed to have enjoyed a tolerable state of health; at all events she never before complained of impeded breathing or palpitation of the heart.

Her late illness commenced during last summer, with difficult respiration and a moderate cyanosis. At the same time, the lower extremities became œdematous. There was no cough, expectoration, nor palpitation of the heart. The stools were, however, pale and irregular, both in frequency and consistence. The diuresis was copious, the urine containing albumen, but no other morbid elements. All these symptoms gradually became more aggravating, so that, eventually, the patient could scarcely more than lie down. The doctor had seen her about a month before her death. Then she exhibited the symptoms of dyspnoea, cyanosis with a frequent, weak, but regular pulse. There were no abnormal, except feeble, sounds about the heart and lungs. Hypertrophy of the former was made out, by the extensive flatness over the anterior surface of the throat. Effusion in the pleura or pericardium could not be discovered. The abdomen was greatly distended; the tympanitic percussion qualified it, being caused by gas. Most likely this symptom had aggravated the dyspnoea. With reference to the urinary secretion nothing new was made out. The quantity was normal; there was plenty of albumen, but the most careful microscopic examination failed to discover casts or blood in the urine. The dangerous condition in which Dr.

* Vide Med. and Surgical Reporter, May 18, 1861, page 158.

Bauer found the patient, and the impossibility of a thorough examination, besides the uselessness of the same, for any practical purpose, impelled him to abstain from further proceeding. The specimens before the Society satisfied the doctor that he had acted with becoming discretion, for even with their aid, it was no easy task to give a satisfactory account for the prevailing symptoms. In the first place he held that the venous circulation, below the diaphragm, had in no way been impeded, despite of the enlargement of the liver. For, at no place, and in no organ, did he meet with distended veins or venous hyperæmia. Not even the vena cava inferior seemed to have been compressed.

Next, the kidneys were but moderately affected; their function still properly carried on. The oedema of the lower extremities could, therefore, not be reduced to suspended renal action. Whether albuminuria, in this case, was dependent on renal disease, Dr. Bauer entertained serious doubts. Perhaps it was the inevitable consequence of the loss of serum into the cellular tissue, and the albumen could, for want of the latter, not be kept dissolved in the blood.

Again, what was the cause of cardiac hypertrophy? The valvular trouble exhibited in the left side of the heart was certainly not sufficient to account for it. The thickening was so insignificant, as not to interfere with the functional purposes of the implicated valves; they were soft and pliable, apparently allowing no regurgitation. Nor was there any impediment in the passage of the blood from one cavity into the other. Yet the eccentric hypertrophy of the left ventricle was enormous. There seemed to be no other solution of this pathological phenomenon, than to refer it to the atheromatous, nonelastic condition of the arteries. In the present case, the atheroma of the arteries was very extensive, and of a very soft consistence, having, evidently, carried its degenerating effects to the muscular coat. At some places, the internal coat had even sloughed away, most probably the result of so-called atheromatous pustule. At any rate, the walls of the aorta had not sufficient elasticity to perform its office; and its calibre seemed to be increased.

In the absence of a more direct cause, Dr. Bauer thought that the atheromatous condition of the arteries had produced a compensating action in the heart. However moderate the assistance of the arterial coats may be in circulating the blood, yet it seems indispensable, and cannot be discontinued for any length of time without producing serious pathological results. The ordinary efforts of the soft atheroma is dilatation and rupture of the arterial coats. But if it does not come to that, it must, by necessity, retard the circulation, and throw an undue responsibility upon the heart that can but result in hypertrophy.

PROF. LEWIS SAYRE'S

Case of Hip Disease in the Third Stage; Fistulous Openings; Angular Deformity and Caries; Free Opening of the Joint; Myotomy; Progressive Recovery, (with two Illustrations.)

Clara S. H., aged seven years, of previous good constitution, met, in the spring of 1858, with a fall upon her left hip. For a few days she experienced

severe pain, which soon subsided, leaving, however, a slight lameness of the extremity. During the following eighteen months she remained almost well; but after violent exercises some soreness in the hip would make itself felt, not sufficient, however, to be regarded with apprehension.

In the fall of 1859, the left knee-joint became so painful as to be considered by her medical adviser as inflammation, and for three months treated as such; loose cartilage was regarded as the cause of that affection. But both lameness and pain steadily increasing, it was at last recognized as hip disease, when the characteristic deformity, with elongation and eversion of the extremity appeared. A seton was thereupon applied behind the trochanter, and cod-liver oil given with bichloride and tonics. The patient grew nevertheless worse; the pain was intense, the joint immovable, and tender to the touch. During night, spasms would set in, accompanied with great agony, which the liberal use of opiates failed to mitigate. Appetite failed her, and she became much emaciated.

In June, 1860, a swelling commenced in the neighborhood of the joint. From that time her limb became shorter, adducted, inverted, and much contracted at the hip. Simultaneously with those changes, relief from pain came, and despite the increasing deformity, the little patient felt comparatively comfortable. The swelling gradually extended downwards on the thigh, and finally opened five inches above the knee, on the outer aspect of the extremity, and in other places high up.

Those sinuses continued open, discharging profusely until, in April last, Dr. Sayre saw the patient, when she presented the appearance of the first diagram, taken in photograph on the 20th of April.

Fig. 1.



On the 24th of April, assisted by Drs. Barnatzky, Cleveland, Guingly, and others, Dr. Sayre subcutaneously divided the adductors, the sartorius, and tensor vaginae femoris muscles, when the motion of the joint became quite free, producing, however, a

roughened and grating feel. The probe passing from the sinus near the knee up to the trochanter, the Doctor considered it expedient to secure a free and direct discharge, by a sufficiently large incision behind the trochanter into the joint, which at once brought him into a large cavity filled with ragged shreds and flaky pus. In passing the finger round the head of the femur, a sinal opening was discovered in the capsule, and in pressing the bone into the acetabulum, gelatiniform material, so peculiar to chronic diseases of joints, was squeezed out. The head of the femur was reduced to about half of its natural size, and quite rough on its posterior aspect.

Although the condition of the joint would have fully justified the exsection of the diseased portion, yet Dr. Sayre concluded to give the patient the benefit of a free outlet, rest, and proper position of the affected extremity, and thus pave the way for spontaneous recovery, and eventually only resort to the extreme remedy of exsection. To accomplish that object, the sinuses were thoroughly cleaned, the extremity, by means of adhesive strips, pully and weight, extended, the foot of the bedstead raised, in order to use the body as a contra-extending force.

The whole proceeding took place under the full influence of chloroform.

No untoward symptom followed the operation; rest and comfort ensuing without the use of anodynes. The appetite immediately improved, and in about three weeks the character of the discharge had entirely changed toward the better, in quantity and quality. Several small and sharp fragments of bone easily escaped. The wound had been daily cleansed and dressed with ordinary honey. The supine position had been observed for seven weeks, when the wound had so far healed as to permit the application of a hip-splint, and the locomotion of the patient. On the 17th of June, just two months after the operation, a photograph was taken, from which

Fig. 2.



the second diagram (fig. 2) had been engraved. On that occasion, Dr. Watson saw the patient at the office of Dr. Sayre, and had embraced the opportunity of carefully examining her, when the following facts were elicited: The limb of the same length with its fellow; the motions of the joint free with the hip-splint on; she bears her entire weight, and walks about with perfect ease; the wound is not yet entirely healed, but the sinuses firmly closed.

In concluding, Prof. Sayre remarked, that the plan pursued in this case deviated obviously from the views he had heretofore promulgated. Under similar circumstances he had advised and performed exsection; but the satisfactory results he had attained by free incisions into diseased joints, had so much encouraged him of late, as to try it in the present case. Whether the exsection could be entirely displaced by this treatment, he was not prepared to assume without a larger field of similar results, but this much he would venture to say, that it would materially reduce the number of such operations.

In the ensuing discussion, most members agreed with the Doctor on the rationale of freely opening diseased joints as the safest and most effectual mode of relief, and complimented him for the boldness with which he had pursued the plan in the face of opposition on the part of the most influential surgeons of the country. The like cases could not fail, moreover, to shake the established theory, that hip disease is always of a strumous nature.

MEDICAL MISSIONARY HOSPITAL CLINIC AT CANTON, CHINA.

Reported by John G. Kerr, M.D., of Canton.

(Continued from page 338.)

EMBRYOTOMY.

The wife of a Chinese teacher was taken in labor on Saturday night. I was requested to see her at 9 o'clock, A. M., on Monday. The face was found presenting, with the forehead to the symphysis pubis, and the chin in the hollow of the sacrum. The head of the child was bent backward, and rested between its shoulders. In the afternoon, I requested Dr. Wong Fun to see the case in consultation. After all our efforts failed, and we were satisfied that it was impossible for the woman to be delivered, it was determined to destroy the child as the only chance of saving the mother. With a pair of cutting forceps, Dr. Wong pierced the head, and reduced its size by crushing the bones and removing the brain; after which, with a pair of straight forceps, the delivery was readily accomplished, and the patient soon recovered her usual health. The necessity of resorting to so dreadful an operation, may be judged of by considering that the head and chest of the child were so situated that they had to be forced through a passage which was barely large enough to receive the head alone. This is the first case, so far as is known, in which embry-

otomy has been performed for the delivery of a Chinese female.

PHYMOSIS.

A man, sixty-three years of age, was operated on for phymosis, June 14th; it had existed from childhood. On opening the contracted prepuce, forty small calculi were removed. They were of uniform size and shape, being about as large as a pea. The patient supposes that the calculi began to form twelve or fifteen years ago. In my report of the Ophthalmic Hospital for 1856, five cases similar to the above are noticed. The numbers of calculi were respectively, 1, 103, 24, 2, and 12.

URINARY CALCULI.

Ten cases have been operated on during the year. The lateral operation was performed in all the cases. The external incision was small, and the incision of the prostrate was very limited. The instruments used were Liston's scalpel and the common staff. The operation was declined in three cases, because of extensive disease. Eight of the ten cases were successful.

RESECTION OF THE UPPER JAW.

A man, named Chai, aged fifty-nine years, from Yang Ping District, was admitted with tumor of the upper jaw of the right side, which began four months ago. It commenced in the antrum, the anterior wall of which was projected forward and upward; while the tumor hung down over the lower jaw, distending the right cheek, which was still healthy.

The entire half of the upper jaw was removed, December 15, in the following manner:—A horizontal incision was made from the angle of the mouth nearly to the ear, and a perpendicular one from the middle of the upper lip, along the side of the nose, almost to the eye. By dissecting up the flap, included in these incisions, the tumor was exposed. The connections of the bone were then cut with the bone-forceps, and the malar-bone was divided with the saw. The last step was to divide the mucous membrane in the roof of the mouth; after which the bone was detached from its place. The edges of the flap were brought to their place again, and secured with hair-lip pins and sutures, and the cavity left by the bone was filled with lint. Chloroform could not be given. The man stood the operation well, and the case has progressed very favorably. The lines of incision, united by first intention, except a part of the horizontal one, which was kept open by the escape of fluids from the mouth. In ten or twelve days, the patient could walk about and take his usual food. In this case, invaluable assistance was rendered by Drs. Carlow and Blanc, and

the following dangerous and difficult operation was performed with great skill by the latter gentleman:

TUMOR OF THE PAROTID SPACE.

A female, aged twenty-two, from Tsun Shin, has had a tumor growing in the parotid space for eight years. It is now circular and flattened, about five inches in diameter, and the entire external surface is ulcerated, giving rise to a constant discharge of fetid, unhealthy pus. The ulceration was caused, several years since, by the application of Chinese caustic. The tumor has recently been growing very fast, and the patient is anxious for its removal.

The operation was performed by Dr. Blanc, assisted by Drs. Carlow and Allen, on the 26th of December. The tumor was found to be very vascular, and several arteries had to be tied. The utmost care was required in dissecting, because of the danger of wounding the external carotid artery. This was found not to be involved, but the tumor rested on it, and a considerable part of the salivary gland was removed. On account of the extensive ulceration, there was not enough skin left to cover the wound. This was partially remedied by making an incision in the temporal space, and another in the neck, so as to allow the skin to be drawn nearer together over the wound. The recovery of the patient was steady and progressive, and now, at the end of three weeks, the cicatrization of the wound is almost complete.

WOUND OF THE CHEST.

Among the out-patients in the month of May, was a man who had received a stab with a spear in the chest, eighteen months ago. At the point where it entered, two inches above the nipple, there was a small fistulous opening, leading to a large cavity in the lung. A silver probe was too short to reach the bottom, and it could be moved about in every direction over a diameter of three inches. Auscultation and percussion showed that the entire right lung was consolidated, with this large cavity in the centre secreting pus. The patient was thin and feeble, but had not much cough. Exercise caused difficulty of breathing. This case is one of those curious examples occasionally met with which show how much disease may exist in some of the vital organs, and yet life be continued for a long time.

A man named Ko Ming, from Peking, attached to the custom-house, applied for the relief of severe paroxysms of pain in the crown of the head, which he attributed to the gnawing of a worm in his brain, that had entered through the nose. So fully convinced was he of the presence of a worm, that he insisted for several weeks that his head should be opened

and the worm taken out, and, as he came while the repairs of the hospital were in progress, he rented a house close by, that the operation might be performed. Finding medical treatment of no avail, it was determined to introduce a seton in the back of the neck, using as much ceromony as so simple an operation would admit of. In a few days the counter-irritation from the seton gave decided relief, and he began to believe my assurance that there was no worm in his brain. In a few weeks, he was so much better as to return to his business.

THE MEDICAL AND SURGICAL REPORTER.

S. W. BUTLER, M. D. } Editors and Prop's.
R. J. LEVIE, M. D. }
L. C. Butler, M. D., Assistant Editor.

PHILADELPHIA, SATURDAY, AUGUST 3, 1861.

THE USE OF ALCOHOLIC STIMULANTS IN MEDICAL PRACTICE.

It is only a few years since, almost the entire energies of the medical profession were invoked against the use of alcoholic liquors. Large and extended investigations were made, showing their effects upon the human system, chemical, physiological, and pathological. The stomach and other organs of the body were exhibited in all the various stages of drunkenness, from the imbibition of the first glass to the sad result. Its effects were declared, with singular unanimity, by the profession to be "evil, and only evil, and that continually." Their influence upon the system, producing disease, deteriorating the blood, exciting to unnatural action the various organs of the body, and producing in the end destructive to all healthy tissue, was depicted in glowing colors. By many their use as a medical agent was entirely interdicted, and the materia medica was ransacked to produce a stimulant which should take their place. Alcohol was not wanted in the human system, it was said. The stomach revolted against it at the first onset, and could only be made to tolerate it by that wonderful law of nature, by which an organ can adapt itself to an increase or a perversion of its natural function. As soon as possible, it sent it on in its journey through the system, only to be rejected with indignation by every organ of the body in its normal condition, and to be taken up by the scavengers of the system, and thrown off as a thing not only worthless but hurtful. The brain reeled under

its influence; the nervous system was shattered even to the verge of destruction, and the upright man was made to lie, prone with the beasts of the field. In its composition it had nothing from which healthy tissue could be eliminated; it had nothing which could enter into the composition of the solvent juices of the stomach, the bile, the chyle, the lymph, the blood, the muscle, the tendon, the nerve, the heart, the lungs, the brain, or any other organ of the system. In a word it was poison; deleterious to persons in health, and unnecessary in the cure of disease.

Now, was this view of alcoholic stimulants in medical practice correct? Did the fathers in medicine teach their pupils the truth? If so, how does it happen that the use of these stimulants is now constantly increasing, and that so much of the practice of the present day consists in the administration of "Bourbon Whiskey," "Spirits of Juniper," "Port and Madeira Wine," and "Brandy." These articles, especially the first two, put up in attractive form, with a tastefully elaborated label upon its side, are found now to occupy the marble counter of the drug shop, instead of the shelves of the low groggery; and if you examine the neatly printed wrapper which envelopes them, you will find the certificate of your next door neighbor perhaps, a prominent and worthy physician, recommending their use, and thus contributing to their sale as remedies for disease.

Has new light dawned upon us in this age of the world? Or has the sun of medical science gone back upon "the dial" to the days of Brown, when all disease was comprised in one term, "asthenic," and, of course to be treated with stimulants? Or has the human system so changed in its progressive development, during the last century, as that disease assumes new forms, and exhibits new phenomena? Or have the "green withs," with which public opinion, developing itself in "Maine laws," has bound the people for the last few years, become as "tow," bursting from the tortness of their tension?

To answer these questions is not now our purpose. We leave them with our readers, whilst we place before them the fact, now every day becoming patent, that the use of stimulants in medical practice is increasing. The tendency

of the age is to extremes; and medicine, as everything else, must partake, more or less, of that overwhelming tendency. The student who has read the clinical lectures of Dr. Todd, of London, (England,) upon certain acute diseases, has no doubt been astonished at the boldness with which he employs stimulants in his treatment. In a case of acute rheumatism, in a girl seventeen years of age, he ordered six drachms of brandy every hour; in another case of pyæmic inflammation, he gave a pint a day for a month at a time; and we ourselves have known instances wherein much larger quantities were given at the same intervals.

In the Royal Infirmary, Edinburgh, the use of alcoholic stimulants has been steadily increasing for the last five years. In three wards of that institution in 1856, the whole amount of wines and spirits used was 1,739 ounces; in 1860, 4,178 ounces. Of malt liquors there was used 126 pints; in 1858, 208, showing a steady increase.

But we need not go out of our own country to find instances quite as much to the point as the foregoing. If you inquire into the routine of hospital practice you will find the use of stimulants increasing, and the modification is so marked, that the physicians in attendance are impelled, by a sense of responsibility, to caution their pupils against the long continuance of such treatment, as calculated to fix a habit upon the patient which is not only injurious to himself, but also to the well-being of society. So also, among country practitioners, the administration of stimulants is fast becoming the rule, whilst the contrary practice is the exception. Whether the disease be erysipelas, or diphtheria, rheumatism or consumption, active stimulation is thought to be necessary, and brandy and "Bourbon whisky" are the stimulants most generally prescribed as best suited to the nature of the disease, and probably to the taste of the patient.

Now we must not be understood as opposing the legitimate and proper use of stimulants. In a vast number of cases they are, no doubt, required, and should be administered, and we would leave a wide margin for the exercise of sound judgment and wise discretion.

But we submit whether the tide is not setting too strongly in the direction of stimulants; whether there is not a moral as well as a therapeutical aspect of this matter which, as conservators of the public weal, the physician is bound to consider; and, whether there is not a weighty responsibility resting upon him to be ware lest, while he seeks to save his patient from the ravages of disease, he be not entailing upon him a habit which will bring down his gray hairs, or those of his posterity, with sorrow, to the grave.

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EDITORIAL NOTES AND COMMENTS.

The brief inquiry in the London *Lancet* relative to the "sterility of twin sisters," has drawn forth several replies. In one case, a lady had *twenty-three* children, and her twin sister *fifteen*; in another, one had *three*, the other *two*; and still another, the elder had *five*, and the younger *three*.

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The *Lancet* for July 6, gives the first report of the "Analytical Sanitary Commission," instituted for the purpose of analysing "the solids and fluids consumed by all classes of the public." The examinations are made by the microscope, and by chemical analysis. Of fifteen samples of coffee examined, six were genuine, and nine contained chicory in various proportions, from about one-fourth to one-third, a half or more; in one case nearly the whole of the mixture was composed of chicory. And this result is recorded as a great improvement on the examination of the same article in 1851, when 34 samples were analysed, and only three were found genuine. But the article is still extensively adulterated. And a like condition of things, would, no doubt, be found in this country, if a like thorough analysis was to be made. A very small proportion of that which is labeled "ground coffee," is such in fact. There is coffee in the mixture, no doubt, but it is frequently, nay, we may say *generally* adulterated with chicory, which is perhaps the most inoffensive of any adulteration; and it may be, often is, still further compounded with roasted rye, wheat, beans, split peas, (this latter article being an article of commerce especially used for that purpose,) carrots, beats, and sometimes with some of the red earths, woody fibre, and saw dust, ground acorns, burnt

sugar. The livers of slaughtered cattle are, it has been affirmed, used for the same purpose in certain localities, being dried or roasted. Some of these adulterations are harmless, comparatively, but they tend to establish the fact that the purchaser of "ground coffee" is egregiously imposed upon in his purchase. He asks for "coffee," he gets its adulterations. We would that the *Lancet* would extend its investigations across the Atlantic, if even no better results should follow than did its analysis in 1851 in London; and yet we would rather that a like sanitary commission be formed on our own shores, that the rascality and cupidity of our own dealers in "the solids and fluids consumed by the public," might be thoroughly exposed.

The *Medical Times and Gazette* records the case of a man who was bitten by a dog which he was admiring and patting on the head, in one of the "Taverns" of London. Not long after the man became very violent; showed a dislike to water; barked like a dog several times; imitated the crowing of a cock; talked in an incoherent manner, declared his room was wet and infested with various kinds of fish. When the dog was killed, he seemed to be much better, but the excitement soon returned, and the man died. His case is said to have been one of hydrophobia, for no other reason, probably, only that it followed the bite of a dog. But the dog was not rabid, or, at least, had hitherto exhibited no symptoms of that affection. Nor did the poor man exhibit the usual symptoms of hydrophobia. He must, therefore, have fallen a victim, the *Times* argues, to fright, which, acting upon his highly nervous temperament, induced symptoms more nearly allied to *mania-a-potu*.

The *Lancet*, in commenting upon this case, remarks: "that the excessive fear of being bitten by a dog in hot weather is groundless. Facts prove that dogs are not more liable to madness in hot weather than in cold; in fact, a greater number of cases occur in the early months of the year than at any other time; and while the disease occurs frequently in very cold climates, it is *unknown* in Turkey, and in tropical climates where dogs are allowed to roam about freely. A dog which has bitten any one should not be destroyed, but, confined and watched." [Our advice would be, to kill the dog immediately, and then no risk will be run of any future depredations. The cases

will be exceedingly rare in which hydrophobia will exhibit itself, unless the virus be actually present in the system.] "Finally, a suspected bite should at once be sucked with the mouth, or treated by a powerful caustic, or a cupping glass applied over the wound, and as soon as possible either cauterized by actual heat, or excised."

Notwithstanding the facts may be as stated above, we yet think the safer course to be, to muzzle the dogs that run at large during the hot months. It is vastly easier to prevent hydrophobia than to cure it when once it has attacked the system.

A case of some interest in a medical point of view has just been decided before the London (Eng.) Court of Exchequer. We find it reported in the *Times and Gazette*. Mr. Gattie and wife brought an action against Mr. Halford, surgeon, for alleged malpractice in attending the plaintiff's wife during her confinement, using instruments in such an unskillful manner as that she has suffered numbness and lameness ever since; and for a breach of contract in neglecting and refusing to send for assistance if either chloroform or instruments should be necessary. Drs. Murphy, Barnes, and Mr. Margetson testified that the defendant's practice in using instruments without assistance, was wrong, and that he administered chloroform in an improper manner. Drs. Locock and Ramsbotham, together with the defendant, gave it as their testimony that the instruments and chloroform were properly used: that any assistance beyond that of a nurse was unnecessary, and that there was no engagement of the nature alleged. The jury, after an absence of two hours, returned a verdict for the defendant.

The importance of re-vaccination, in order to ensure entire security against the invasion of variola, is most clearly shown from the statistics of such re-vaccination in the Prussian army in 1860, which we find in the *Lancet*, copied from the *Preuss. Med. Zeitung*, 1861. During the year 69,096 soldiers were re-vaccinated, of which 49,770 proved successful. Of the whole number vaccinated, 57,525 exhibited distinct cicatrices from former vaccinations; 7,420 showed indistinct marks, and 4,151 had no marks at all. Of those who were successfully re-vaccinated, not one had variola, six had varicella, and only one varioloid, showing how

well the system is protected from the ravages of variola by vaccination, and showing, too, that marks and cicatrices are not always evidences that vaccination has been entirely successful.

We observe that the last number of *Braithwaite's Retrospect* copies the article upon the *subcutaneous application of the metallic ligature to the cure of varicose veins of the leg*, written by one of the editors of the *REPORTER*, and which appeared originally in its columns, as from the *American Medical Times*. We are at a loss to account for the error, since the editors of the *Retrospect* are so scrupulously careful to acknowledge the exact paternity of the papers from which their abstracts are made, and since, also, the original source of the article in question was properly announced in the *Times*. We are pleased to be the humble instrument of communicating so valuable a paper to the medical profession throughout the world, in the columns of *Braithwaite*; at the same time we prefer that our valued cotemporary, the *Times*, should shine in its own light, and not in that which it borrows from another.

At his clinic, on Saturday last, at the Pennsylvania Hospital, Dr. Levick made some observations upon the use of propylamine, as a remedy for rheumatism, which are worthy of note. He had seen this article announced in the papers as "Dr. Levick's Specific for Rheumatism." Whilst he took this occasion to disclaim all connection with or belief in specifics for any disease—still, he felt bound to say, that propylamine had been used in this hospital with remarkable success, in cases of *acute* rheumatism. In those cases the facts were that whereas the patient was sick with rheumatism, he took propylamine and got well. This was the invariable result. But in chronic rheumatism, the results were not as satisfactory, indeed he had found no benefit from its use in such cases. While, therefore, he regarded propylamine as a valuable remedy in the acute form of this formidable disease, he yet must caution the young practitioner against reliance upon it in any of its chronic forms.

Our Boston correspondent, under date of July 11, 1861, brought to the notice of our readers the newly discovered anæsthetic, Keroselene, and announced that Dr. H. J. Bigelow,

of that city, had been making some observations to determine its value. The results of that investigation we find in a letter to the *Boston Medical and Surgical Journal*, extracts from which we here append. He says:

"This fluid presents remarkable properties. It is tasteless as water, volatile and inflammable as ether, though burning with a dense white light; of a faint chloroform odor, which, as it evaporates, changes to that of coal tar, and then disappears absolutely and altogether; so that a handkerchief saturated with the fluid has, at the end of a few minutes, when dry, no odor at all, nor has the room or atmosphere where it has been used, any trace of its presence. Both ether and chloroform leave, in different degrees, a persistent, *fæd* and stale aroma after evaporation, as is well known. They are also far less agreeable to inhale than this new agent, which has thus an obvious advantage over either of them.

"Subsequently, I inhaled the new vapor, which Dr. Hodges, at my request administered. Complete insensibility supervened, lasting several minutes, with some diminution of the volume of the pulse. Its effect was wholly agreeable, leaving neither headache nor nausea, nor bad taste.

"I have this morning administered it to three surgical patients. The first, a girl of nineteen, presenting some hysteric tendencies, having thrust some twenty needles in her leg, was wholly insensible during the extraction of four of those which remained. Yet there was more cough than I had expected from the wholly uniritating odor of the vapor, more muscular rigor than usual in favorable anæsthesia, and more intermittence of the pulse.

"In a second patient, to whom it was given preparatory to an operation upon the face, insensibility was equally complete. But this woman did not take it kindly, and its complete effect was attended by so feeble and intermittent a pulse as to lead me to desist until she had recovered. A second attempt reproduced, with anæsthesia, the feeble and intermittent pulse, and I again desisted. Upon her recovery, I gave her common ether vapor, which she afterwards said was less agreeable, but which was followed by complete insensibility, the pulse beating steadily and full, at 76. Though this patient, perhaps, succumbed more readily to a third anæsthesia, there seemed to be in the two first trials a certain degree of purple color and asphyxia, with its attendant spasm, which I have elsewhere described as an occasional and disagreeable symptom of attempted anæsthesia. To guard against this asphyxia, which might possibly have resulted from the folded towel, upon which I habitually administer ether, I tried in the next case an open sponge. The subject required a considerable incision for a mammary abscess, and was a patient of Dr. H. G. Clark, with whose assent I tried the keroselene.

In spite of the open sponge, the symptoms of asphyxia again appeared, suggesting to Dr. Clark, before operating, their resemblance to those from charcoal gas. The color was livid, and the rigidity marked. In each of these cases, the quantity used was from one to two ounces.

"In conclusion, it may be remarked of these three cases, that they are insufficient for satisfactory demonstration, and that their common and unfavorable symptoms may well have been but a coincidence; yet they suggest some caution in the use of the kerosolene vapor. It is, probably, more potent than that of ether, requires a free admixture of air, and may produce upon the system some impression or influence, other than that of the mere intoxication attendant upon the use of ether. In awaiting further evidence, it may be considered established that kerosolene is an anæsthetic of undoubted efficiency, and that it possesses certain remarkable and attractive properties peculiar to itself."

The discovery of the anæsthetic properties of this agent was accidental. A man who had been sent in to clean a cistern at the kerosene works became affected by it, and it was afterwards tried on flies and mice.

A paper, communicated by M. Hippolyte Larrey to the Society of Surgery last week, contains some interesting statistics relative to the success of the various operations undertaken for the extraction of false cartilages in or about the knee-joint. The list takes a wide sweep, reaching from the days of Ambrose Paré down to our own time. M. Larrey's original object, (if I recollect rightly,) in collecting these cases, was to aid an American surgeon, Mr. Squire by name, in his defence against a charge of malapraxis brought against him by a patient. The latter had been operated on by Mr. Squire, and an ankylosis of the knee-joint had been the result of the operation. As M. Larrey had, in 1832, written a thesis on the subject, our American *confrère* selected him as umpire on the question. What the upshot of the trial may have been I know not, but the fruits of M. Larrey's researches are certainly worth presenting to your readers. Out of a total of 168 cases of extraction, 129 were by direct incision, and 38 by the indirect or subcutaneous method. The results stand thus:

No. of Cases.	Cured.	Failures.	Deaths.
129	98	5	28
38	19	15	5

The extraction of false cartilages of the knee-joint is, according to M. Larrey, a grave operation when practised by direct incision, and difficult when by the subcutaneous method. The dangers resulting from the presence of the

foreign body are much less to be dreaded than those to be apprehended from the operation; and though, no doubt, as seen by the above figures, a large proportion of cures has been registered, many failures have been passed over in silence, and not boasted of. The operation should never be performed, unless the following conditions be realized:

1. Complete mobility of the false cartilage.
2. Presence of pain, effusion into the joint, lameness, and other ill effects resulting from its presence in the articular cavity.
3. Failure of palliative measures.—*Lancet*.

We have often admired the sleepless vigilance with which the Medical Press of our transatlantic brethren watch the entrance of the Temple of Medicine. No sooner does an imposter show his head at the threshold, than he is mercilessly pelted till he disappears. Or if he chance, by any means, to gain admission he is soon booted out. Quackery is compelled to hide its diminished head. But an attack upon the citadel of medicine has now sprung up from quite an unexpected source, and the *Lancet*, thus announces the fact:—

"A lady, *teterrima causa belli*, has penetrated to the core of our hospital system, and is determined to affect a permanent lodgement. The advanced guard of the Amazonian army, which has so often threatened our ranks, on paper has already carried the outposts, and entered the camp." Just think of it, "a course," ill-featured "amazon" among doctors. That wont do at all! But the writer emphatically declares that she is "a lady of amiable purpose, and highly to be respected for her excellent bearing," and, moreover, she has already "taken courses of materia medica and chemistry at the school of the Middlesex Hospital." But the lady aforesaid is not satisfied with having reached the camp, she desires to observe all the minutiae of camp life. She is delighted with the inkling she has obtained, now she longs for a full view. "How should this fair intruder be received?" asks the *Lancet*. "Is she to be welcomed as on all other occasions we should welcome a lady, and desire to aid a woman aiming to benefit her sex, not less than herself? or should we resist the charge of parasols, and run the risk of 'taking our quietus with a bare bodkin?'" But the lady is in earnest, and she plies her attacks vigorously. She has money. She will endow the school with the snug little sum of 2,000 pounds, as a foundation for a female medical scholarship. But will not her own innate modesty induce her to forbear. Think of a lady witnessing the manipulation for stone in the bladder; the operation for fistula in ano. She remembers that her own sex is liable to even these sad casualties, and worse exposures, and

she still persists in her application. "The charge of parasols" must be resisted, says the *Lancet*. "A lady among doctors" is not to be endured. Her application is rejected.

Preventives of Hydrophobia.—The Parisian Prefect of Police, the correspondent of the *Lancet* says, has caused to be published for public benefit the following advice in regard to bites by rabid animals:

1. Persons bitten by animals suspected of madness are recommended immediately to squeeze the wound so as to evacuate all the blood likely to be infected by the dog's saliva.

2. The wound is afterward to be washed with a weak solution of carbonate of ammonia, potash, soap-suds, lime-water, or salt-and-water, and, in default of these, with pure water, or even—urine.

3. A piece of iron is to be heated to a white heat, and the part bitten deeply cauterized therewith.

State of Pennsylvania—Hospital Department—Harrisburg, July 26, 1861.—A Medical Board, for the examination of candidates for the post of Surgeon in the Volunteer Regiments of the State, will convene at Harrisburg, Tuesday, August 6, 1861, when and where all desirous of appointment will appear. By order of the Governor,

HENRY M. SMITH, M.D.,
Surgeon General of Pennsylvania.

Correspondence.

*Headquarters, Company "G,"
First Regiment Delaware Volunteers,
Perryville, Cecil County, Md.*

A sojourn with our Company of nearly four weeks, in this whilom noted place, has developed the disagreeable fact, that it has not been promotive of the health of the little community stationed here as a guard to the railroad. We were here but a very few days, when the unpleasant conviction forced itself upon our mind that the ailments were more frequent than at other localities, where our lot as soldiers placed us; and, up to the present time, there has been a sensible increase in the amount of sickness, until nearly every man has been more or less affected. To-day the climax was certainly reached, when, in making up our report of the sick, (for, in addition to our other duties, we assumed the care of the health of the Company, reluctant to abandon the practice entirely,) we were not greatly astonished to find the names of forty men on the list and unfit for duty. That would, unquestionably, have been a fear-

ful report, if the sickness had been of an alarming character; but fortunately the cases were chiefly mild ones. The sick list had, for several previous days, ranged from five to ten and fifteen a day.

What was and is the character of these cases, will be the natural inquiry. The intestinal canal is principally involved, and, in many instances, decided bilious symptoms have been strongly apparent. We have had some few instances of dysentery occurring, but not of an aggravated nature; frequent discharges, considerable pain, little febrile irritation, were noted—treated simply but as amply as a small camp medicine-box would admit of; blue pill and Dover's powders the main reliance.

Diarrhoea has been very annoying, though not serious. The majority of the men have been affected by it; the discharges were so frequent, in many instances, that they were incapacitated for drill; pain almost invariably accompanied. Castor-oil, with tr. opium or Dover's powders, usually sufficed for the time being, but it did not remain in check long, the causes, directly to be spoken of, still existing.

The bilious disposition has been sensibly felt. There is scarcely a man in the Company who has been in perfect health—nearly all having been slightly indisposed. A general complaint of disagreeable sensations. No one has felt warranted in calling himself well. Headache, dull pains in the limbs, a desire to sleep, tongue with yellow coat, sometimes with white, lassitude, inaction, little interest in military matters, relaxed bowels commonly, occasional chilly feeling, sallow appearance, with features that were an index of a bad state of system, with much debility; there was not a total loss of appetite; neither was there much irritability of stomach.

Your correspondent, who comes from a bilious district, did not escape, but was obliged to take some of his own physic; he could not hope to be an exception. To show one feature, to-day, when the men who were fit for duty were drawn up in line, numbering about twenty-five, we took occasion to examine the tongue of each man, when it appeared that nearly the entire number had furred tongue—some deeply so. Upon the whole, there has been a general deterioration of the *physique*.

The next inquiry is, What causes are there in operation here to occasion such an amount of slight ill health in the Company? Natural causes primarily. Perryville is situated on the east bank of the Susquehanna, and about five miles from the Chesapeake. There is considerable made-land here, upon which are the railroad buildings, wharves and piers, with a large amount of piling to flank it, and to arrest the passage of all the vegetable matter that approaches it. At every tide, the long grass is brought and deposited in a cove at the rear of our quarters, and there left, as the tide recedes, exposed to the sun's rays, which, latterly, have

been rather intense. Added to this, the water the men are obliged to drink is very indifferent. We are unable to judge of its elements; but there is, undoubtedly, some quality which relaxes the bowels.

It is unnecessary to charge this general disposition to the rations, want of cleanliness or undue exposure, for the rations are of the ordinary kind, but such as to stimulate thirst. The policing of the grounds and the cleanliness of all the surroundings are under our own supervision, and, as to personal cleanliness, the men have every opportunity for ablutions, of which they do not fail to avail themselves; and the quarters are excellent and commodious. We cannot divest our mind of the opinion that Perryville will, as the season advances, be more dangerous to the troops who may be quartered here than the secession forces.

Upon exhibiting our formidable sick-list to the colonel, he immediately took steps to have us removed, and the probability is, that tomorrow we shall pitch our tents on the opposite side of the river at Havre de Grace, where we hope to regain some of our lost health.

D. W. MAULL,
Captain of Company "G,"
Delaware Volunteers.

July 19, 1861.

NEWS AND MISCELLANY.

Surgeon's Report of the Bull Run Battle.—The following extracts from the official report of Surgeon King of the United States army, will be interesting to all our readers. We find it in one of the city dailies:

ARLINGTON, Department N. E. Virginia, }
July 26th, 1861.

SIR:—Being Chief of the Medical Staff, serving with the army in the Department of N. E. Virginia, I have the honor to make the following report of so much of the results of the action on the 21st, at Bull Run, as came within my charge. As the officers of the Medical Staff were attached to the different regiments and on duty with them, I deemed it proper to remain with, and accompany the General commanding and staff, from the beginning to the termination of the battle, in order that I might be enabled to visit in this way every part of the field where the killed and wounded might be found.

After the action had fairly commenced, and the wounded and the dead were seen lying on the field in every direction, I despatched Assistant Surgeon D. L. Magruder to the rear, with directions to prepare a church, which I had observed as we passed before arriving at the scene of action, for the reception of our wounded, and also to send the ambulances for-

ward as rapidly as possible to pick up the wounded and the dead.

In a very few minutes the ambulances made their appearance and continued throughout the day to visit every part of the ground which was accessible, in order to be within reach of those parts of the field where the fighting was going on, and wounded were to be found.

It is due to the ambulance drivers, to say that they performed their duties efficiently, and the results of their operations also show how absolutely necessary these means of conveyance are to the comfort and relief of the wounded, in giving them shelter and water when ready to perish with heat and thirst.

The stretchers were found very useful and comfortable to the wounded, and were in constant requisition in conveying them to the nearest ambulance.

So far as I am informed, the medical staff belonging to the different volunteer regiments discharged their duties satisfactorily. I observed Acting Surgeon Miles busily engaged in dressing wounded men under the shade of a tree in a part of the field where the fire from the enemy was very hot. He addressed me in a brief inquiry, as I passed, relative to the safety of his father, and then resumed his occupation.

Surgeon C. C. Kerney, of Col. Hunter's Division, and Assistant Surgeon D. L. Magruder attached to the Commanding General's staff, did good service in the hospital church I have mentioned, and also in two houses near the church, where the wounded were placed after the church had been filled. These officers remained busily engaged in their duties until the enemies' cavalry made its appearance, and but narrowly escaped capture, when they left. Drs. Swift and Winston, attached to the New York Eighth, remained with their sick, sacrificing selfish considerations for their own safety in order that their wounded might not be neglected, and are now prisoners.

I am informed that Assistant Surgeons Grey and Steinsburg of the Regular Army, and Drs. Honiston and Swan of the New York Fourteenth, also preferred to remain rather than abandon their charge. The conduct of these officers is worthy of all commendation.

The impossibility of making a careful survey of the field after the battle had ceased, must be my apology for the briefness and want of detail in this report. I may mention, before concluding, that I met on the field Col. Heintzelman, U. S. A., with a minnie ball in his arm. I extracted the ball as he sat on his horse, and applied the necessary dressings. I attended to a number of cases on the field where from hemorrhage and other circumstances immediate attention seemed to be necessary.

I am, sir, very respectfully,

your obedient servant,

W. S. KING,

Surgeon and Medical Director, U. S. A.

Capt. J. B. Fry, Asst. Adj. Gen'l, U. S. A.

Dr. George Wiley has been appointed out-door physician in the Eleventh Poor District of this City, in place of *Dr. Clark*, resigned, he having received an appointment in the military service.

Surgeon James S. De Benneville, of this City, has been detached from the Hospital at Camp Curtin, and transferred to the Eleventh Regiment P. R. V. C., commanded by Col. Gallagher, and now in Washington.

It is asserted that Gen. McClellan will issue an order suppressing the sale of spirituous liquors any where within ten miles of the encampments around Washington. If such an order is issued, we hope it will be strictly enforced.—In accordance with this suggestion, we observe that Congress has just passed a law containing the same provisions.

Just now there seems to be a great want of hospital stores for the wounded in the late battle, and we observe that the ladies of this city are responding nobly to the call for aid in this direction, and the same kind hands are also attending to those wounded soldiers who are now passing through our city on their return home.

Quite a number of Surgeons of the Federal Army were taken prisoners at the late battle at Manassas Junction, and several of them wounded. Among the latter, was *Dr. N. S. Barnes*, of the Twenty-seventh Regiment New York Volunteers, contused wound of the knee. Among the former, were Surgeons *A. Powell* and *Foster Swift*, and Assistant Surgeons *G. S. Winston* and *Charles de Graw*, of the New York regiments; *Dr. Edward T. Taylor*, of the Fifteenth New Jersey Volunteers; *Dr. Buxtone*, of the Fifth; *Dr. Swift*, of Geneva, New York. They were captured while attending to their duties in the hospital, near the battle ground. *Mrs. Hinsdale*, of Detroit, Mich., the wife of one of the privates in the Second Michigan Regiment, was also taken prisoner, and was assigned to one of the hospitals as nurse. She has since been released, and reports the wounded and prisoners to be well treated.

The Sanitary Commission have "examined minutely" the new building just erected at Washington, near the railroad depot, for a temporary resting place for the soldiers as they arrive, and have expressed their satisfaction at the arrangements made for the comfort of the men. The building is 300 feet long, and has sleeping and eating accommodations for 2,000 men.

The French Academy of Sciences offer a prize of 10,000 francs (to which the Emperor has added 10,000, making 20,000 in all,) for the best essay on the reproduction of bones by the preservation of the periosteum. The essays are to be sent to the Secretary of the Institute before the first of April, 1866, and are to be written in the French language. We trust our own countrymen may be induced to enter the lists.

Medical Committee of the International Exhibition of 1862.—The following eminent gentlemen constitute the Committee on Surgical Instruments and Appliances, of the Great Exhibition of 1862: *Mr. Wm. Laurence*, F.R.C.S., *Mr. Joseph Henry Green*, F.R.C.S., *Mr. J. M. Arnott*, F.R.C.S., *Mr. J. F. Souch*, F.R.C.S., *Mr. Caesar H. Hawkins*, F.R.C.S., *Mr. James Luke*, F.R.C.S., *Mr. F. S. Haden*, F.R.C.S., and *Mr. James Paget*, F.R.C.S.

Gauze Ventilators.—A system of ventilating rooms by apertures covered with wire gauze has been introduced. It is claimed for it that it allows a circulation of air, yet prevents excessive drafts.

Death of another Physician from Chloroform.—*Dr. Mailly*, of Mauritius, died lately from the effects of chloroform which he had inhaled for the purpose of having a tooth extracted. The administration was performed by himself, and at a signal given the tooth was removed. Immediately afterwards he expired.

Death of an Anatomist.—*Mr. Henry Gray*, the author of the illustrated "Descriptive and Surgical Anatomy," which has been reprinted and very favorably received in this country, died recently in London of confluent small-pox, at the early age of thirty-six.

Dr. Thomas M. Logan again sends us his meteorological and necrological report of Sacramento, Cal., for June. The range of temperature during the month was 29°, from 82°, the highest, to 52°, the lowest. A remarkable prismatic circle is noted as surrounding the sun on the 4th. The number of deaths during the month was twenty, of which eight were from consumption.

Communications Received.

Connecticut—*Drs. J. W. Lawton*, *S. L. Childs*, *A. W. Coates*, with encl.; *G. H. Presten*. Illinois—*Dr. M. Davis*. Iowa—*Drs. G. M. Staples*, *Moses Cousins*. Kentucky—*Dr. D. Johnson*. Massachusetts—*Dr. E. L. Warren*, *E. de Gersdorff*, with encl.; *Wm. Osgood*. Per. *J. G. White*: *Drs. Ephraim Cutler*, *Thomas S. Scates*, *Wm. Ingalls*, *M. A. Harrison*, *W. P. Westhoeft*, *W. E. Underwood*, *E. Woodward*, *C. C. Tower*, *John Homans*, *D. Humphries Storer*, *Alanson Abbe*, *Theod. Guenther*, *J. W. Warren*, *Joshua Tucker*, *T. L. Jenks*, *E. T. Gatchell*, *N. H. Dillingham*, *J. W. Phelps*, *Stephen Ball*, *E. L. Rolf*, *Samuel Gregg*, *C. L. Chase*, *P. R. Macomber*, each with encl.; *Dr. Basted*. Missouri—*Dr. J. H. Bridwell*. New Jersey—*Dr. J. C. Stroud*. New York—*Dr. E. Gere*; *Per John Hulme*: *Drs. A. T. Zabitzki*, *Wm. B. Bradner*, *W. P. Townsend*, *J. N. Taylor*, *Geo. E. Putney*, *Avery Cook*, *Sol. Van Etton*, *H. Hardenbergh*, *J. S. Whitney*; *Dr. W. G. Wood*, each with encl.; *Dr. J. Swinburne*, (Rep.) Ohio—*Drs. Jenner & Co.*, with encl.; *J. W. Vance*, *J. P. Capell*; *C. P. Herrington*, with encl. Pennsylvania—*Drs. E. S. Meisheimer*, *Woodhouse & Thompson*; *G. B. Curtis*, with encl.; *J. A. & G. K. Thomson*, with encl.; *A. J. Martin*, with encl.; *C. K. Coudrick*, with encl.; *George S. Kumble*, *Joseph G. West*, *J. Sitt*, *E. R. Rittenhouse*; *J. L. Thomas*, with encl.; *S. S. Cowell*; *A. Dobson*, with encl.; *P. S. Lohsening*, *Washington Burg*. Rhode Island—*S. W. Francis*, (com. and letter.) Vermont—*Dr. J. H. Currier*.